Claims

What is claimed is:

1. An electrical capacitor comprising a mixture of electrically conductive particles and non-conductive particles, said mixture being spaced between two parallel conductive plates to which electrical leads are attached; wherein the electrical conductive particles comprise a magnetic material that renders them responsive to the application of a magnetic field.
2. A capacitor according to claim 1 where the mixture of electrically conductive particles and non-conductive particles has been exposed to a magnetic field in order to orient the electrically conductive particles.
3. A capacitor according to claim 1 where the magnetic material is selected from the group consisting of iron, nickel, cobalt, alloy steel, alnico, hard ferrites, rare-earth magnets, and neo magnets.
4. A capacitor according to claim 1 where the electrically conductive particles are plated with a metal.
5. A capacitor according to claim 4 where the metal is selected from the group consisting of gold and platinum.
6. A capacitor according to claim 1 where the electrically non-conductive particles are made of a material selected from the group consisting of plastics, ceramics, and glass.
7. A capacitor according to claim 6 where the material used for the electrically non-conductive particles is barium titanate.

8. A capacitor according to claim 1 where the electrically conductive and non-conductive particles are of a size in the range of 100 mesh to 1 micron in diameter.
9. A capacitor according to claim 1 where the electrically conductive and non-conductive particles are spherical in shape.
10. A capacitor according to claim 1 where the electrically conductive and non-conductive particles are spheroidal in shape.